

c.) Amendments to the Claims**Status Identifiers of the Claims**

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Withdrawn-currently amended)
7. (Withdrawn)
8. (Withdrawn)
9. (Withdrawn)
10. (Withdrawn)
11. (Withdrawn)
12. (Withdrawn)
13. (Withdrawn)
14. (Withdrawn)
15. (Withdrawn)
16. (Currently amended)
17. (Previously presented)
18. (Previously presented)
19. (Previously presented)
20. (Previously presented)

Listing of Claims

Claim 1-5 (cancelled)

Claim 6 (withdrawn-currently amended): A method of preparing a synthesized plasmid combined from at least two DNA fragments comprising:

- (a) preparing a linear replication origin DNA fragment;

- (b) preparing a linear selection marker gene DNA fragment;
- (c) combining the DNA fragments prepared from steps (a) and (b) to form a circular synthesized plasmid without ~~referring entire structure of an existing plasmid~~ using a whole existing plasmid as a structure template;
- (d) introducing the plasmid made from step (c) into a host cell; and
- (e) selecting the plasmid with appropriate replication origin and selection marker from transformed host cells.

Claim 7 (withdrawn): The method according to claim 6, wherein any DNA fragment alone used for combining the synthesized plasmid cannot confer both autonomous DNA replication and selection to a plasmid.

Claim 8 (withdrawn): The method according to claim 6, wherein the linear DNA fragments of steps (a) and (b) are prepared from polymerase chain reaction.

Claim 9 (withdrawn): The method according to claim 6, wherein the linear DNA fragments of steps (a) and (b) are prepared from restriction digestion.

Claim 10 (withdrawn): A method of using a synthesized plasmid comprising:

- (a) Linearizing the synthesized plasmid;
- (b) inserting one or more functional DNA fragments to the linearized plasmid to make other plasmids;
- (c) introducing the plasmids made from step (b) into host cells;

(d) selecting the plasmids and host cells with desired properties; and

(e) using the plasmids and host cells for biomedical applications.

Claim 11 (withdrawn): The method according to claim 10, wherein linearizing the plasmid was achieved by restriction digestion.

Claim 12 (withdrawn): The method according to claim 10, wherein linearizing the plasmid was achieved by PCR.

Claim 13 (withdrawn): The method according to claim 10, wherein the functional DNA fragments encode a promoter, a regulatory sequence, a ribosome binding site, restriction sites, a terminator, a polypeptide, a replication origin, and a selection marker gene.

Claim 14 (withdrawn): The method according to claim 10, wherein the desired properties are plasmid replication, selection, and the properties added by functional DNA fragments inserted from step (b).

Claim 15 (withdrawn): The method according to claim 10, wherein the biomedical applications are DNA cloning, DNA amplification, gene expression, gene therapy, and DNA immunization.

Claim 16 (Currently amended): A synthesized plasmid comprising at least a replication origin and a selection marker gene wherein;

(a) the said plasmid is synthesized ~~only~~ with sequences ~~of known functions~~ generated from existing plasmids;

(b) the said plasmid is synthesized ~~only with sequences of desirable functions~~ without using a linearized existing plasmid as starting material;

(c) the said plasmid is synthesized without using a whole existing plasmid as starting material; and

(d) the said plasmid is synthesized without ~~referring the entire structure of an existing plasmid~~ using a whole existing plasmid as a structure template.

Claim 17 (Previously presented): An isolated DNA fragment comprising the plasmid according to claim 16.

Claim 18 (Previously presented): A vector comprising the plasmid according to claim 16.

Claim 19 (Previously presented): A bacterial cell strain comprising the vector according to claim 18.

Claim 20 (Previously presented): A eukaryotic cell line comprising the vector according to claim 18.